

III. Remarks:

Reconsideration of this application is respectfully requested.

Claims 1-52 are pending in the application. Claims 1, 3, 7, 34 and 52 are independent. Claims 48-52 are new. The new claims are supported throughout the specification. No new matter is being added. Claims 1, 19-21, 24-30 and 47 are being amended to provide proper antecedent basis. A clause has been deleted from dependent claims 4 and 8. The deleted clause has been reintroduced in new claims 48 and 49. Claim 6 is now dependent on claim 3 and requires the primary windings to be connected in series. New claims 50 and 51 are similar to claims 5 and 6, but depend from claim 7.

The Examiner has rejected all of the claims based upon Nguyen et al. (4,695,933). Nguyen et al. describes a plurality of distinct subconverters 42-1, 42-2, etc. with outputs which are combined to produce output power (see, for example, Abstract, col. 3 lines 39-54, and FIG. 4). This is structurally distinct from the invention as claimed which provides for various forms of sharing within the converter.

For example, in claim 1 a primary side circuit is connected between the first voltage input and the second voltage input. The primary side circuit includes a first primary winding of a first transformer and an auxiliary section. The converter also includes a plurality of rectifier circuits. Each rectifier circuit has a separate secondary winding of the first transformer. The rectifier circuits are connected in parallel with one another and with the output. The auxiliary section is for causing the first transformer to transfer power from the first primary

winding to the secondary windings and to operate without saturation.

In claim 3 a primary side circuit is connected between the first voltage input and the second voltage input. The primary side circuit includes a primary winding of each of a plurality of transformers, and an auxiliary section. The converter also includes a rectifier circuit having a secondary winding for each of the plurality of transformers. The auxiliary section is for causing the transformers to transfer power from the primary windings to the secondary windings and to operate without saturation. The auxiliary section includes switches for repeatedly connecting and disconnecting the primary windings from the input, and for resetting the transformers, wherein a plurality of the switches in the auxiliary section are shared between transformers.

In claim 7 a primary side circuit is connected between the first voltage input and the second voltage input. The primary side circuit includes a primary winding of each of a plurality of transformers, and an auxiliary section. The converter also includes a rectifier circuit having a secondary winding for each of the plurality of transformers. The auxiliary section is for causing the transformers to transfer power from the primary windings to the secondary windings and to operate without saturation, and the auxiliary section includes a combination of switches and capacitors for repeatedly connecting and disconnecting the primary windings from the input, and for resetting the transformers. The combination of switches and capacitors in the auxiliary section is shared between transformers.

As a further example, claim 34 also provides for sharing of switches in the auxiliary section.

In claim 52 a primary side circuit is connected between the first voltage input and the second voltage input including a primary winding of each of a plurality of transformers, and an auxiliary section. The converter includes a rectifier circuit having a secondary winding for each of the plurality of transformers the auxiliary section is for causing the transformers to transfer power from the primary windings to the secondary windings and to operate without saturation. The rectifier circuit is for converting output of the secondary windings into a one direction waveform and converting the one-direction waveform into a DC voltage. The rectifier circuit further comprises a plurality of switches for performing the conversion of output of the secondary windings into a one-direction waveform. A plurality of the switches of the rectifier circuit are shared between the secondary windings of the transformers

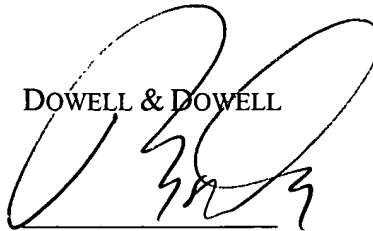
Accordingly, the independent claims and all of the other claims in the application that depend therefrom are allowable.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Response to Office Action is respectfully requested.

Respectfully submitted,

DOWELL & DOWELL

A large, stylized handwritten signature in black ink, appearing to read 'RD', is written over the printed name 'DOWELL & DOWELL'.

Ralph A. Dowell
Agent for Applicants
Registration No. 26,868

Date: JANUARY 3, 2006

DOWELL & DOWELL
Suite 406
2111 Eisenhower Avenue
Alexandria, VA 22314
USA (703) 415-2555